ESYBOX DIVER
7" ELECTRONIC MULTISTAGE SUBMERSIBLE PUMPS WITH INVERTER

D CONNECT

TECHNICAL DATA

Flow rate maximum: 7,2 m³/h

Head up to: 55 m

Maximum immersion depth: 12 m standard version

Type of pumped liquid : Water Clean, free from solid or abrasive substances, non-viscous, non-aggressive, non-crystallized and chemically neutral

Free passage: 2 mm

Minimum suction depth: 110 mm

Minimum level of water: 35 mm

Liquid temperature range: from 0°C to +55°C

Minimum and maximum ambient temperature: <0°C / +50°C

Maximum immersion depth: 15 m

Adjustable constant pressure: pre-set 3 bar, adjustable from 1 to 5,5 bar

Outlet connection: Threated 1" 1/4

Pump maximum diameter : 185 mm

Impeller/s material:
Technopolymer with ring impeller in AISI 304 stainless steel

Maximum number of starts: 60/h

Protection class: IP 68

Non-stop service: yes

Motor insulation class: F

Power cable (m) and plug: 15 m with plug

Single phase power input: 230 V 50 Hz / 60 Hz

Possible type of installation: Fixed, horizontal or vertical. Submerged or semi-submerged. It can be installed on the surface, with positive suction, in a vertical position with the DOC68 accessory (supplied separately).

Special versions on request:
X version with suction kit for suction at a higher level.
Version for drinking water WRAS, ACS, NSF.
Surface version (the DOC68 accessory is required)

Certification:
WRAS, ACS, NSF (only model for dirking water) are pending approval.

7" multi-stage electronic pump with variable speed drive for clean water designed for use in wells, cisterns or tanks. The pump can be used submerged, partially submerged or on the surface (with the appropriate accessory). It is suitable for pressurization, reuse of rainwater, gardening activities and irrigation in residential building service. The pump can also be installed horizontally. Equipped with PLC (PowerLine Communication) and Wi-Fi technology. DConnect Box 2 supplied as standard. There is an X version with 1" union and kit X which includes 1 meter suction pipe and float to prevent the suction of impurities from the bottom. The entire pump is IP 68 certified. With the DOC68 accessory (supplied separately) the pump becomes an IP 68 surface pump to be used in positive suction. Certified version for drinking water available on request.

CONSTRUCTION FEATURES OF THE PUMP

Technopolymer pump body to resist corrosion and oxidation. Integrated non-return valve. Integrated debris filter. Overpressure valve, in case of completely submerged installation, with the freezing of the water in the external pipes, the valve prevents the damage to the pump. On the pump body there is a air-vent valve that improves priming during the first installation or in the event of emptying the tank/well, and a stainless steel handle to move the pump. Integrated 0,04 liter expansion vessel sized to prevent the pump from cycling in the event of small leaks and to compensate for water hammer. No maintenance or recharging is required. The coupling between the three impellers in technopolymer, the floating ring and the smoothing disc both in stainless steel allow a limited wear of the hydraulics and a more precise alignment of the components. Suction height can be adjusted using the appropriate accessory (included): 3,5, 4, 6 or 8 cm.

CONSTRUCTION FEATURES OF THE MOTOR

High efficiency Permanent Magnet submersible motor cooled by the pumped liquid. hydraulic side of the motor shaft in AISI 303 stainless steel. Double mechanical seal in oil chamber where the seal on the motor side is subjected only to submersible pressure (1 bar), while the other side is subjected to operating pressure (up to 5,5 bar) ensuring that the pump is watertight. Electronically protected motor. Quick coupling/release cable to facilitate installation inside tanks or cisterns. Tear-off power cable connection.

FEATURES OF THE ELECTRONIC

The electronic operation allows the pump to start and stop autonomously Variable speed drive for operation according to the system requirements. Working pressure adjustable from 1 to 5,5 bar and protects against dry running. NFC (Near Field Communication) pocket for the use of a float sensor (supplied separately) which can be connected without opening the pump maintaining a watertight seal. Thanks to the PLC communication technology, the pump transmits data through the power cable to the DConnect Box 2.
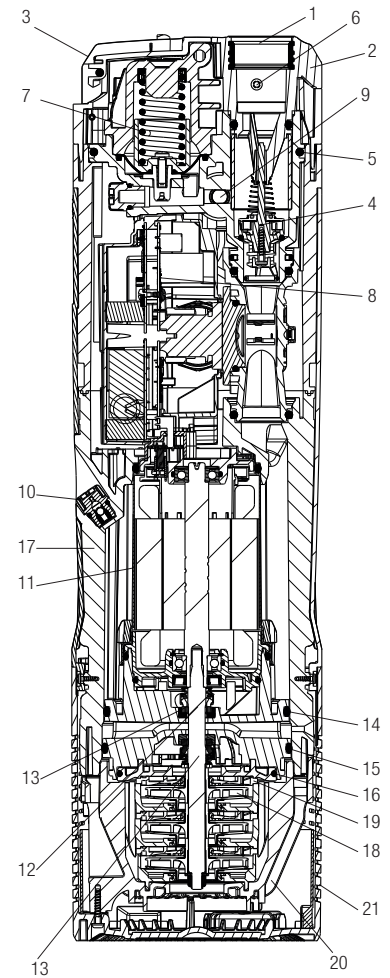
DCONNECT BOX 2

Thanks to the DConnect Box 2 and the DConnect app it is possible to check and manage the system pressure, alarms and the amount of residual water in the tank directly from your smartphone or tablet. DConnect Box 2 supplied as standard.

MATERIALS

N°	PARTS	MATERIALS
1	INSERT	BRASS
2	COVER	TECHNOPOLYMER
3	HANDLE	AISI 304
4	CHECK VALVE	TECHNOPOLYMER/NBR/FERRITE/AISI302
5	OR	NBR
6	OVERPRESSURE VALVE	TECHNOPOLYMER/BRASS
7	VESSEL WITH SPRING AND MEMBRANE	TECHNOPOLYMER/AISI304/EPDM70
8	PCB	--
9	PRESSURE SENSOR	TECHNOPOLYMER
10	VENTING VALVE	TECHNOPOLYMER/AISI420/NBR
11	MOTOR SLEEVE	AISI 304
12	MOTOR SHAFT	AISI 303
13	DOUBLE MECHANICAL SEALS	RESIN IMPREGNATED CARBON/AISI304/AISI302/NBR
14	OR	NBR
15	OR	NBR
16	OR	NBR
17	MOTOR BODY	TECHNOPOLYMER
18	IMPELLER	TECHNOPOLYMER/AISI304
19	DIFFUSER	TECHNOPOLYMER
20	PUMP BODY	TECHNOPOLYMER
21	FILTER	TECHNOPOLYMER

PERFORMANCE AT 50 HZ

MODEL	ELECTR. DATA			HYDRAULIC DATA													
	P2 NOMINAL		Q=m³/h	0	0,6	1,2	1,8	2,4	3	3,6	4,2	4,8	5,4	6	6,6	7,2
	kW	HP	Q=l/min	0	10	20	30	40	50	60	70	80	90	100	110	120
ESYBOX DIVER	0,95	1,3	H (mt)	55	55	55	55	55	55	53	44	34	26	17	7,5	
ESYBOX DIVER X	0,95	1,3		55	55	55	55	55	55	53	44	34	26	17	7,5	
ESYBOX DIVER + DOC 68	0,95	1,3		55	55	55	55	55	55	53	44	34	26	17	7,5	

ELECTRICAL DATA AND DIMENSIONS

MODEL	ELECTRICAL DATA					A	B	H	Ø DNM	Ø DNA	PACKING DIMENSIONS			PACKING VOLUME m³	Q.TY X PALLET	WEIGHT Kg
	POWER INPUT 50 Hz	P1 kW	P2 NOMINAL		In A						L/A	L/B	H			
			kW	HP												
ESYBOX DIVER	1 x 220-240 V ~	1,3	0,95	1,3	5,5	185	-	651	1" 1/4	-	740	230	300	0,05106	15	17
ESYBOX DIVER X	1 x 220-240 V ~	1,3	0,95	1,3	5,5	195	32	676	1" 1/4	1"	780	230	300	0,0538	15	17
ESYBOX DIVER + DOC 68	1 x 220-240 V ~	1,3	0,95	1,3	5,5	235	92	658	1" 1/4	1" 1/4	382*	306*	178*	0,0208*	30*	3*

*Data referred to the DOC68 accessory only

ESYBOX DIVER   ESYBOX DIVER X   ESYBOX DIVER + DOC 68
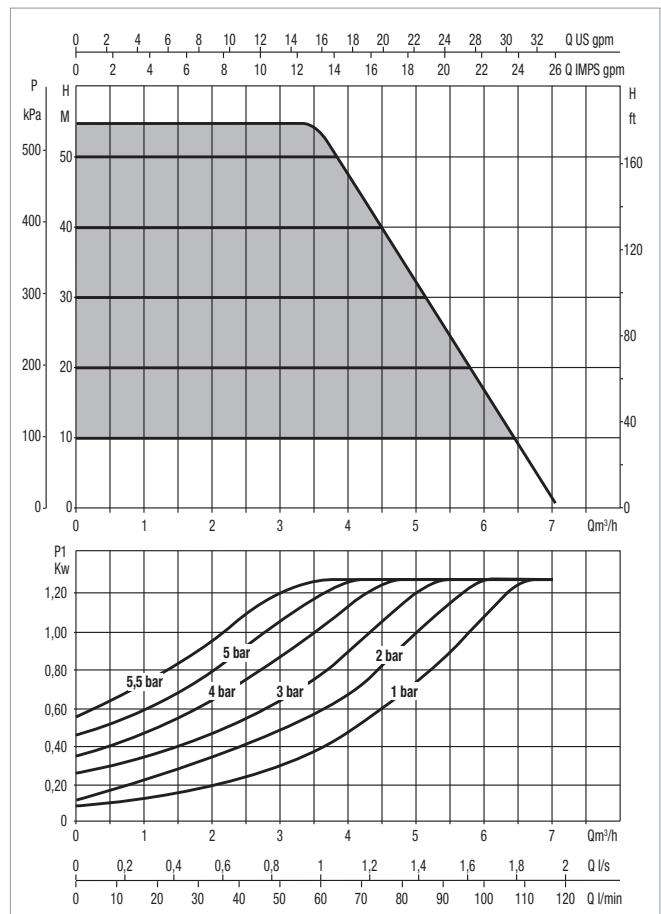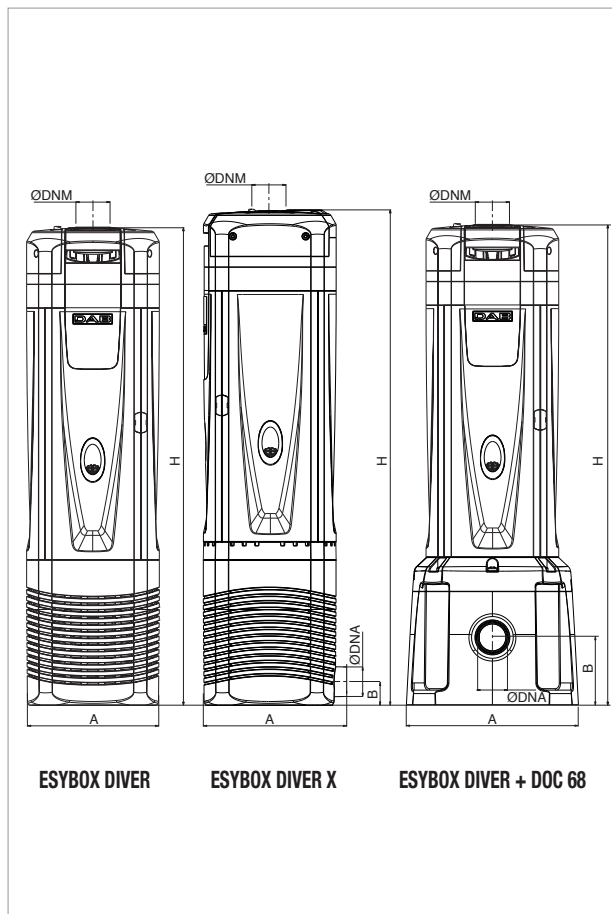
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equivalent to 1000 kg/m³. Curve tolerance according to ISO 9906.

	DESCRIPTION	PACKING DIMENSIONS			Q.TY X PALLET	WEIGHT Kg
		L/A	L/B	H		
	NFC WATER LEVEL MEASUREMENT Only connected to the DConnect Box 2, controls the level of water in the tank and notifies the user of the level via an App).	462	259	105	48	1
	NFC FLOAT Detects the level of water in a tank, preventing emptying of the latter and seizing of the pump avoiding the dry running, due to too low a level of water.	250	250	85	120	1
	KIT X (FOR X VERSION) Combined to X version can be used to collect water at such a level as to avoid the pumping of dust and mud found at the bottom of wells and tanks.	384	312	219	30	2
	DOC68 The DOC68 permits installation of the DTron even outdoors as an IP68 certified surface pump.	382	306	178	30	3